

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/003077

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 B66B 23/12**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC7 B66B 23/00, 29/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
KR,JP: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
KIPO NPS system: "roller", "track", "step"

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,992,605 A (HARUTA) 30 NOVEMBER 1999 (See whole document)	1-7
A	US 5,472,075 A (YAMASHITA et. al) 05 DECEMBER 1995 (abstract, Fig.3)	1-7
A	US 4,681,207 A (GOTO et al.) 21 JULY 1987 (abstract, Fig.7, 11)	1-7
A	JP 4-20495 A (TOSHIBA CORP.) 24 JANUARY 1992 (See whole document)	1-7

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
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 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

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 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international search

24 FEBRUARY 2005 (24.02.2005)

Date of mailing of the international search report

**25 FEBRUARY 2005 (25.02.2005)**

Name and mailing address of the ISA/KR



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